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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,587	07/22/2004	Steven E. Field	71202-0044	4372

20915 7590 06/20/2007

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EXAMINER	
TOWA, RENE T	

ART UNIT	PAPER NUMBER
3736	

MAIL DATE	DELIVERY MODE
06/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/710,587	FIELD ET AL.	
	Examiner	Art Unit	
	Rene Towa	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/25/04, 10/29/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *IDS OF 12/29/05*.

DETAILED ACTION

Claim Objections

1. Claim 17 is objected to because of the following informalities:

at line 1, the limitation "laterally" should apparently read --lateral--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4-6, 9-10 and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Barsch (US 6,234,177).

In regards to claim 1, Barsch disclose(s) a marking apparatus for the percutaneous placement of an imaging marker 42 at a predetermined location in a tissue mass to facilitate subsequent determination of the predetermined location, the marking apparatus comprising:

a handle to be grasped by a user;

a cannula 60 comprising:

a peripheral wall 62 forming a lumen 64,

a proximal end carried by the handle,

a distal end terminating in a self-piercing tip, and

a lateral opening 22 in the peripheral wall 62, which is open to the lumen 64;

a plunger 52 having a distal end 54 and slidably received within the lumen 64 for movement between a ready position, where the distal end is spaced inwardly from the self-piercing tip to form a marker recess in communication with the lateral opening 22 and sized to receive an imaging marker 42, and an expelled position, where the distal end is advanced a sufficient distance into the marker recess to expel a marker 42 contained therein through the lateral opening 22 (see figs. 4A-C & 5-6; column 3/lines 7-41; column 4/lines 23-53; column 6/lines 3-15; column 7/lines 16-28).

In regards to claim 2, Barsch disclose(s) a marking apparatus, and further comprising at least one imaging marker 42 contained within the marker recess (see figs 5-6).

In regards to claim 4, Barsch disclose(s) a marking apparatus, wherein the handle, cannula 60, and plunger 52 are operably coupled such that they form a self-contained marking apparatus that can be easily and conveniently handled by a user to effect operation of the marking apparatus from the ready position to an expelled position (see figs. 4C-6).

In regards to claim 5, Barsch disclose(s) a marking apparatus, wherein the cannula 60 is rigid (see figs. 4C-6).

In regards to claim 6, Barsch disclose(s) a marking apparatus wherein the distal end of the cannula 60 is pointed to form the self-piercing tip (see figs. 4C-6).

In regards to claim 9, Barsch disclose(s) a marking apparatus wherein the distal end of the cannula 60 is pointed to form the self-piercing tip (see figs. 4C-6).

In regards to claim 10, Barsch disclose(s) a marking apparatus and further comprising a ramp 54 on the plunger 52 to aid in expelling an imaging marker 42 (see figs. 4C-6; column 5/lines 65-67).

In regards to claim 13, Barsch disclose(s) a marking apparatus wherein a ramp 54 is located on the distal end of the plunger 52 (see figs. 4C-6; column 5/lines 65-67).

In regards to claim 14, Barsch disclose(s) a marking apparatus, wherein the handle, cannula 60, and plunger 52 are operably coupled such that they form a self-contained marking apparatus that can be easily and conveniently handled by a user to effect operation of the marking apparatus from the ready position to an expelled position (see figs. 4C-6).

In regards to claim 15, Barsch disclose(s) a method for percutaneously placing a marker 42 at a predetermined location in a tissue mass using a self-piercing, side-ejecting, self-contained marking apparatus comprising a cannula 60 defining a lumen 64 and terminating in a self-piercing tip, with a lateral opening 22 in communication with the lumen 64, and a plunger 52 slidably received within the lumen 64 for expelling a marker 42 in the lumen 64 through the lateral opening 22, the method comprising:

inserting the cannula 60 into the tissue mass by puncturing an exterior of the tissue mass with the self-piercing tip; and

expelling the marker 42 through the lateral opening 22 by sliding the plunger 52 within the lumen 64 (see figs. 4A-C & 5-6; column 3/lines 7-41; column 4/lines 23-53; column 5/lines 65-67; column 6/lines 3-15; column 7/lines 16-28).

In regards to claim 16, Barsch disclose(s) a method wherein the inserting step comprises locating the lateral opening 22 near a predetermined location 30 in the tissue mass where it is desired to be marked (see figs. 4C-6).

In regards to claim 17, Barsch disclose(s) a method wherein the lateral opening 22 is located beneath the predetermined location 30 (see figs. 4C-6).

4. Claims 1-6, 9-12 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Burbank et al. (US 6,725,083).

In regards to claim 1, Burbank et al. disclose(s) a marking apparatus for the percutaneous placement of an imaging marker 10 at a predetermined location in a tissue mass to facilitate subsequent determination of the predetermined location, the marking apparatus comprising:

a handle 56 to be grasped by a user;

a cannula 7 comprising:

a peripheral wall forming a lumen,

a proximal end carried by the handle 56,

a distal end terminating in a self-piercing tip, and

a lateral opening 9 in the peripheral wall, which is open to the lumen;

a plunger 54 having a distal end and slidably received within the lumen for movement between a ready position, where the distal end is spaced inwardly from the

self-piercing tip to form a marker recess in communication with the lateral opening 9 and sized to receive an imaging marker 10, and an expelled position, where the distal end is advanced a sufficient distance into the marker recess to expel a marker 10 contained therein through the lateral opening 9 (see fig. 6; column 11/lines 6-67; column 12/lines 1-4).

In regards to claim 2, Burbank et al. disclose(s) a marking apparatus, and further comprising at least one imaging marker 10 contained within the marker recess (see fig. 6).

In regards to claim 3, Burbank et al. disclose(s) a marking apparatus, and further comprising multiple imaging markers 10 contained within the marker recess (see fig. 6).

In regards to claim 4, Burbank et al. disclose(s) a marking apparatus, wherein the handle 56, cannula 7, and plunger 54 are operably coupled such that they form a self-contained marking apparatus that can be easily and conveniently handled by a user to effect operation of the marking apparatus from the ready position to an expelled position (see fig. 6).

In regards to claim 5, Burbank et al. disclose(s) a marking apparatus, wherein the cannula 7 is rigid (see fig. 6).

In regards to claim 6, Burbank et al. disclose(s) a marking apparatus wherein the distal end of the cannula 7 is pointed to form the self-piercing tip (see fig. 6).

In regards to claim 9, Burbank et al. disclose(s) a marking apparatus wherein the distal end of the cannula 7 is pointed to form the self-piercing tip (see fig. 6).

In regards to claim 10, Burbank et al. disclose(s) a marking apparatus and further comprising a ramp on the cannula 7 to aid in expelling an imaging marker 10 (see fig. 6).

In regards to claim 11, Burbank et al. disclose(s) a marking apparatus wherein a ramp is located in the lumen adjacent the lateral opening 9 (see fig. 6).

In regards to claim 12, Burbank et al. disclose(s) a marking apparatus wherein the distal end of the plunger 54 is flexible and is deflectable toward the lateral opening 9 by the ramp when the plunger 54 is moved to the expelled position (see fig. 6).

In regards to claim 14, Burbank et al. disclose(s) a marking apparatus, wherein the handle 56, cannula 7, and plunger 54 are operably coupled such that they form a self-contained marking apparatus that can be easily and conveniently handled by a user to effect operation of the marking apparatus from the ready position to an expelled position (see fig. 6).

In regards to claim 15, Burbank et al. disclose(s) a method for percutaneously placing a marker 10 at a predetermined location 4 in a tissue mass using a self-piercing, side-ejecting, self-contained marking apparatus comprising a cannula 7 defining a lumen and terminating in a self-piercing tip, with a lateral opening 9 in communication with the lumen, and a plunger 54 slidably received within the lumen for expelling a marker 10 in the lumen through the lateral opening 9, the method comprising:

inserting the cannula 7 into the tissue mass by puncturing an exterior of the tissue mass with the self-piercing tip; and

expelling the marker 10 through the lateral opening 9 by sliding the plunger 54 within the lumen (see fig. 6; column 11/lines 6-67; column 12/lines 1-4).

In regards to claim 16, Burbank et al. disclose(s) a method wherein the inserting step comprises locating the lateral opening 9 near a predetermined location 4 in the tissue mass where it is desired to be marked (see fig. 6).

In regards to claim 17, Burbank et al. disclose(s) a method wherein the laterally opening is located beneath the predetermined location 4 (see fig. 6).

In regards to claim 18, Burbank et al. disclose(s) a method wherein the expelling step comprises expelling multiple markers 10 into the tissue mass (see fig. 6).

In regards to claim 19, Burbank et al. disclose(s) a method wherein at least one of the multiple markers 10 is expelled at a different location in the tissue mass than another of the multiple markers 10 (see fig. 6).

Since two markers cannot occupy the same space at the same time, Burbank et al. inherently teach a method step wherein at least one of the multiple markers 10 is expelled at a different location in the tissue mass than another of the multiple markers 10.

5. Claims 1-6, 9-11 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones et al. (US 2004/0236212).

In regards to claim 1, Jones et al. disclose(s) a marking apparatus for the percutaneous placement of an imaging marker 15 at a predetermined location in a tissue mass to facilitate subsequent determination of the predetermined location, the marking apparatus comprising:

a handle 20 to be grasped by a user;

a cannula 11 comprising:

a peripheral wall forming a lumen 12,

a proximal end carried by the handle 20,

a distal end terminating in a self-piercing tip 23, and

a lateral opening 17 in the peripheral wall, which is open to the lumen 12;

a plunger 13 having a distal end and slidably received within the lumen 12 for movement between a ready position, where the distal end is spaced inwardly from the self-piercing tip 23 to form a marker recess in communication with the lateral opening 17 and sized to receive an imaging marker 15, and an expelled position, where the distal end is advanced a sufficient distance into the marker recess to expel a marker 15 contained therein through the lateral opening 17 (see figs. 1A & 3; par 0012, 0015, 0025, 0027, 0028 & 0033).

In regards to claim 2, Jones et al. disclose(s) a marking apparatus, and further comprising at least one imaging marker 15 contained within the marker recess (see figs. 1A & 3).

In regards to claim 3, Jones et al. disclose(s) a marking apparatus, and further comprising multiple imaging markers 15 contained within the marker recess (see figs. 1A & 3).

In regards to claim 4, Jones et al. disclose(s) a marking apparatus, wherein the handle 20, cannula 11, and plunger 13 are operably coupled such that they form a self-contained marking apparatus that can be easily and conveniently handled by a user to

effect operation of the marking apparatus from the ready position to an expelled position (see figs. 1A & 3).

In regards to claim 5, Jones et al. disclose(s) a marking apparatus, wherein the cannula 11 is rigid (see figs. 1A & 3).

In regards to claim 6, Jones et al. disclose(s) a marking apparatus wherein the distal end of the cannula 11 is pointed to form the self-piercing tip 23 (see figs. 1A & 3).

In regards to claim 9, Jones et al. disclose(s) a marking apparatus wherein the distal end of the cannula 11 is pointed to form the self-piercing tip 23 (see figs. 1A & 3).

In regards to claim 10, Jones et al. disclose(s) a marking apparatus and further comprising a ramp 24 on the cannula 11 to aid in expelling an imaging marker 15 (see figs. 1A & 3).

In regards to claim 11, Jones et al. disclose(s) a marking apparatus wherein a ramp 24 is located in the lumen 12 adjacent the lateral opening 17 (see figs. 1A & 3).

In regards to claim 14, Jones et al. disclose(s) a marking apparatus, wherein the handle 20, cannula 11, and plunger 13 are operably coupled such that they form a self-contained marking apparatus that can be easily and conveniently handled by a user to effect operation of the marking apparatus from the ready position to an expelled position (see figs. 1A & 3).

In regards to claim 15, Jones et al. disclose(s) a method for percutaneously placing a marker 15 at a predetermined location in a tissue mass using a self-piercing, side-ejecting, self-contained marking apparatus comprising a cannula 11 defining a lumen 12 and terminating in a self-piercing tip 23, with a lateral opening 17 in

communication with the lumen 12, and a plunger 13 slidably received within the lumen 12 for expelling a marker 15 in the lumen 12 through the lateral opening 17, the method comprising:

inserting the cannula 11 into the tissue mass by puncturing an exterior of the tissue mass with the self-piercing tip 23; and

expelling the marker 15 through the lateral opening 17 by sliding the plunger 13 within the lumen 12 (see figs. 1A & 3; par 0012, 0015, 0025, 0027, 0028 & 0033).

In regards to claim 16, Jones et al. disclose(s) a method wherein the inserting step comprises locating the lateral opening 17 near a predetermined location in the tissue mass where it is desired to be marked (see figs. 1A & 3).

In regards to claim 17, Jones et al. disclose(s) a method wherein the lateral opening 17 is located beneath the predetermined location (see figs. 1A & 3).

In regards to claim 18, Jones et al. disclose(s) a method wherein the expelling step comprises expelling multiple markers 15 into the tissue mass (see figs. 1A & 3).

In regards to claim 19, Jones et al. disclose(s) a method wherein at least one of the multiple markers 15 is expelled at a different location in the tissue mass than another of the multiple markers 15 (see figs. 1A & 3).

Since two markers cannot occupy the same space at the same time, Jones et al. inherently teach a method step wherein at least one of the multiple markers 15 is expelled at a different location in the tissue mass than another of the multiple markers 15.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barsch ('177) in view of Joishy (US 5,012,818).

In regards to claim 8, Barsch disclose(s) a marking apparatus and further comprising a ramp on the plunger 52 to aid in expelling an imaging marker 42 (see figs. 4C-6; column 5/lines 65-67).

Barsch discloses a system, as described above, that teaches all the limitations of the claim except for a 13-gage cannula.

However, Joishy discloses a system comprising a 13-gage cannula 1 (see figs. 1-2; column 7/lines 64-68; column 8/lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Barsch with a 13 gage cannula similar to that of Joishy in order to provide, a small, less invasive cannula that minimizes patient discomfort.

8. Claims 3, 11-12 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barsch ('177) in view of Burbank et al. ('083).

Barsch discloses a system, as described above, that teaches all the limitations of the claim except for a ramp located on the lumen adjacent the lateral opening or multiple markers.

However, Burbank et al. disclose(s) a system wherein a ramp is located in the lumen adjacent the lateral opening 9; wherein the expelling step comprises expelling multiple markers 10 into the tissue mass; wherein the distal end of the plunger 52 is flexible and is deflectable toward the lateral opening 22 by the ramp when the plunger 52 is moved to the expelled position.

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Barsch with a ramp adjacent the lateral opening similar to that of Burbank et al. since such a modification will serve the same purpose of biasing the marker outside the cannula.

Moreover, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Barsch with multiple markers similar to that of Burbank et al. since such a modification will serve the same purpose of marking the biopsy site. Furthermore, it has previously been held that merely duplicating a part (i.e. the number of markers) for a multiple effect is not patentable--See *In re Harza, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).*

Even moreover, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Barsch with a flexible plunger similar to that of Burbank et al. since such a modification will serve the same purpose of expelling the marker from the device.

Even moreover yet, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Barsch as modified by Burbank et al., above, with a step of marking multiple locations since

such a modification will serve the same purpose of marking a biopsy site at predetermined location. It has previously been held that merely duplicating a part (i.e. the steps of marking a biopsy site) for a multiple effect is not patentable--See *In re Harza, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).*

9. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burbank et al. ('083) in view of Joishy (US 5,012,818).

In regards to claim 8, Burbank et al. disclose(s) a marking apparatus and further comprising a ramp on at least one of the plunger 54 and cannula 7 to aid in expelling an imaging marker 10 (see fig. 6).

Burbank et al. discloses a system, as described above, that teaches all the limitations of the claim except for a 13-gage cannula.

However, Joishy discloses a system comprising a 13-gage cannula 1 (see figs. 1-2; column 7/lines 64-68; column 8/lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Burbank et al. with a 13 gage cannula similar to that of Joishy in order to provide, a small, less invasive cannula that minimizes patient discomfort.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burbank et al. ('083) in view of Barsch ('177).

Burbank et al. discloses a system, as described above, that teaches all the limitations of the claim except for a ramp located on the distal end of the plunger.

However, Barsch disclose(s) a marking apparatus wherein a ramp 54 is located on the distal end of the plunger 52.

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Burbank with a ramp on the distal end of the plunger similar to that of Barsch since such a modification will serve the same purpose of biasing the marker outside the cannula.

11. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. ('212) in view of Joishy (US 5,012,818).

In regards to claim 8, Jones et al. disclose(s) a marking apparatus and further comprising a ramp 24 on at least one of the plunger 13 and cannula 11 to aid in expelling an imaging marker 15 (see figs. 1A & 3).

Jones et al. discloses a system, as described above, that teaches all the limitations of the claim except for a 13-gage cannula.

However, Joishy discloses a system comprising a 13-gage cannula 1 (see figs. 1-2; column 7/lines 64-68; column 8/lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Jones et al. with a 13 gage cannula similar to that of Joishy in order to provide, a small, less invasive cannula that minimizes patient discomfort.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. ('212) in view of Burbank et al. ('083).

Jones et al. discloses a system, as described above, that teaches all the limitations of the claim except for a flexible plunger.

However, Burbank et al. disclose(s) a system wherein the distal end of the plunger 52 is flexible and is deflectable toward the lateral opening 22 by the ramp when the plunger 52 is moved to the expelled position (see fig. 6).

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Barsch with a flexible plunger similar to that of Burbank et al. since such a modification will serve the same purpose of expelling the marker from the device.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. ('212) in view of Barsch ('177).

Jones et al. discloses a system, as described above, that teaches all the limitations of the claim except for a ramp located on the distal end of the plunger.

However, Barsch disclose(s) a marking apparatus wherein a ramp 54 is located on the distal end of the plunger 52 (see figs. 4C-6).

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a system similar to that of Jones et al. with a ramp on the distal end of the plunger similar to that of Barsch since such a modification will serve the same purpose of biasing the marker outside the cannula.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Towa whose telephone number is (571) 272-8758. The examiner can normally be reached on M-F, 8:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RTT/

MAX F. HINDENBURG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 01 5367

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WO 2004/045444 A (INRAD, INC; CHESBROUGH, RICHARD, M; FIELD, STEVEN, E; GOOSEN, RYAN, L) 3 June 2004 (2004-06-03) * page 5, paragraph 1-4 * * claim 45 * * figures 1,2,6A *	1-4,7,8, 10	A61B19/00 A61M25/01
Y		5,6,9	
X	WO 96/08208 A (BIOPSYS MEDICAL, INC) 21 March 1996 (1996-03-21) * page 1, lines 1-4 * * page 21, line 25 - page 23, line 12 * * figure 16 *	1-4,7,8, 10	
Y	WO 98/06346 A (BIOPSYS MEDICAL, INC) 19 February 1998 (1998-02-19) * page 8, line 19 - page 12, line 10 * * figures 3,4 *	5	
A		1,3,4, 8-10	
Y	US 6 234 177 B1 (BARSCH THOMAS) 22 May 2001 (2001-05-22) * column 1, lines 6-66 * * column 5, lines 56-67 * * figures 4C-6 *	6	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61B A61M
A		1,3,5,8, 10	
Y	WO 01/70114 A (RITA MEDICAL SYSTEMS INC; BALBIERZ, DANIEL; EDWARDS, STUART) 27 September 2001 (2001-09-27) * page 1, lines 5-15 * * page 17, line 21 - page 18, line 15 *	9	
A		1	

Not a proper IDS, no boxes for Examiner Signature and Initials.

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Berlin	4 November 2005	Kakoullis, M

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 01 5367

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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04-11-2005

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2004045444 A	03-06-2004	AU 2003290918 A1	15-06-2004
		CA 2506285 A1	03-06-2004
		EP 1565120 A2	24-08-2005
WO 9608208 A	21-03-1996	CA 2199864 A1	21-03-1996
		DE 69534233 D1	30-06-2005
		DE 69534233 T2	27-10-2005
		EP 0781114 A1	02-07-1997
		JP 10508504 T	25-08-1998
		US 6228055 B1	08-05-2001
WO 9806346 A	19-02-1998	CA 2262550 A1	19-02-1998
		DE 69722171 D1	26-06-2003
		DE 69722171 T2	08-04-2004
		DE 69733782 D1	25-08-2005
		EP 0873091 A1	28-10-1998
		ES 2200188 T3	01-03-2004
		JP 2000513610 T	17-10-2000
US 6234177 B1	22-05-2001	NONE	
WO 0170114 A	27-09-2001	AU 4579401 A	03-10-2001
		CA 2402585 A1	27-09-2001
		EP 1265532 A1	18-12-2002
		JP 2003534037 T	18-11-2003
		NZ 521908 A	28-05-2004
		US 6770070 B1	03-08-2004

Not a proper IDS, no boxes for
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82